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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/526,161  | 08/08/2005  | Robert Giehl         | 30071/41004                   | 6490             |
| 4743 7590 01/23/2007<br>MARSHALL, GERSTEIN & BORUN LLP<br>233 S. WACKER DRIVE, SUITE 6300<br>SEARS TOWER<br>CHICAGO, IL 60606 |             |                      | EXAMINER<br>STEVENS, THOMAS H |                  |
|   |             |                      | ART UNIT<br>2121              | PAPER NUMBER     |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/23/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/526,161

Applicant(s)

GIEHRL ET AL.

Examiner

Thomas H. Stevens

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/28/2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

1. Claims 1-20 were examined.

### ***Section I: Non-Final Rejection***

#### ***Specification Objection***

2. The specification is objected to under 37 CFR 1.75(d)(1) as not using the same words and phrases as are in the claims. In particular, claim 11 uses the phrase "mobile end device". A review of the specification has been made but this phrase could not be found.

#### ***Claim Objections***

3. The examiner has provided a list of claim deficiency (possible antecedent issues) examples; however, the list may not be inclusive. Applicants should refer to these as examples of deficiencies and should make all necessary corrections to eliminate the claim objections. All claims have been treated on their merits.

- Claim 4, line 2, "the wiring diagram"; suggestion: "a wiring diagram"
- Claim 6, line 4, "the machine control"; suggestion: "a machine control system"
- Claim 14, line 3, "the corresponding state variable"; suggestion: "a corresponding state variable"

2. Claims 10-12 are objected to because of their reference to three sets of claims to different features, i.e., device, method and system.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 1 recites the limitation "the electrical connection" in line 6. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Welch (U.S. Patent 5,230,061; hereafter Welch). Welch teaches a method based upon the Boolean form by a programmable data structure (abstract)

Claim 1. Method for displaying data ("display device", column 7, line 14) of a machine control system (column 7, lines 7-9) comprising: receiving status data

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(column 8, lines 6-13, table 64) for at least one element ("circuit element" as defined within Welch as a computer processor logic, column 1, lines 42-45) of the system, which represent at least one physical state variable (column 8, line 36); representing the status data (table 64) which have been received for the element ("circuit element" as defined within Welch, as a computer processor logic, column 1, lines 42-45); representing a control circuit diagram (figure 3 with column 7, lines 13-15), which displays, (display device, 48) at least for the element ("circuit element" as defined by Welch), the electrical connection (example of connected electronic modules, figure 1 with column 6, lines 15-22) of the element (as defined by Welch) in the system; where the representation of the status data (column 8, lines 6-13) which have been received for the element ("circuit element" of Welch) occurs in the represented circuit diagram (figure 3 with column 7, lines 13-15).

Claim 2. Method according to Claim 1, where the representation of the circuit diagram (figure 3 with column 7, lines 13-15) occurs using a characterization (defined in the disclosure as "a corresponding element ID is indicated as characterization," or code, column 14, lines 53-55), which has been stored for the element ("circuit element" of Welch), and associated connection data, which represent the electrical connection (example of connected electronic modules, figure 1 with column 6, lines 15-22) of the element ("circuit element" of Welch) in the system.

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Claim 3. Method according to Claim 2, where the characterization (defined in the disclosure as "a corresponding element ID is indicated as characterization," or code, column 14, lines 53-55) allows the association of the element ("circuit element" of Welch) with its status data (contained in table 64).

Claim 4. Method according to Claim 1, where the status data (in table 64) are displayed one of at or on the represented element ("circuit element" of Welch) in the wiring circuit diagram (figure 3 with column 7, lines 13-15).

Claim 5. Method according to Claim 1, where the step of the receiving the status data (table 64) also comprises an identification of elements ("circuit element" of Welch), which are to be represented in the circuit diagram (figure 3 with column 7, lines 13-15), where the representation of the status data (table 64) for the identified elements ("circuit element" of Welch) occurs.

Claim 6. Method according to Claim 1. where, in response to user input, which establishes a preset value (column 10, table 1, lines of code est. rules or values)for the represented status data, (table 64) the preset value (column 10, table 1, lines of code est. rules or values) is set as a value for the corresponding state variable (column 8, line 36) in the machine control system.

Claim 7. Method according to Claim 1, where corresponding target values are

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displayed with the status data (table 64) for the element ("circuit element" of Welch).

Claim 8. Method according to Claim 1, where corresponding limit values are displayed with the status data (table 64) for the element ("circuit element" as defined by Welch, column 1, lines 42-45).

Claim 9. Method according to Claim 1, where previous status data (table 64) for the element ("circuit element" as defined by Welch, column 1, lines 42-45) are represented. which indicate at least one previous value ("old to new value", column 16, lines 55-56) for the state variable (column 8, line 36).

Claim 10. Device ( "machine" column 7, lines 7-9) which is adapted for carrying out a method according to one of Claim 1.

Claim 11. Device according to Claim 10, where the device is a mobile end device, which is used for one of the startup process (column 14, line 67, starting points) , maintenance or error diagnosis of a machine control system (column 7, lines 7-9).

Claim 12. A system comprising the device according to Claim 10 in combination with a machine control system(column 7, lines 7-9).

Claim 13. Method according to Claim 2, where the step of receiving the status data (table 64) also comprises an identification of elements ("circuit element" of Welch), which are to be represented in the circuit diagram (figure 3 with column 7, lines 13-15), where the representation of the status data (table 64) for the identified elements ("circuit element" of Welch) occurs.

Claim 14. Method according to Claim 2, where, in response user input which establishes a preset value (column 10, table 1, lines of code est. rules or values) for the represented status data, the preset value (column 10, table 1, lines of code est. rules or values) is set as a value for the corresponding state variable (column 8, line 36) in the machine control system (column 7, lines 7-9).

Claim 15. Method according to Claim 5, where, in response to the user input which establishes a preset value (column 10, table 1, lines of code est. rules or values) for the represented status date, the preset value (column 10, table 1, lines of code est. rules or values) is set as a value for the corresponding state variable (column 3, line 18 and column 5, lines 34-36) in the machine control system(column 7, lines 7-9).

Claim 16. Method according to Claim 2, where corresponding target values are displayed with the status data (table 64) for the element ("circuit element" of Welch).



Claim 17. Method according to Claim 1, where corresponding limit values are displayed with the status data (table 64) for the element ("circuit element" of Welch).

Claim 18. Method according to Claim 7, where corresponding limit values are displayed with the status data (table 64) for the element ("circuit element" of Welch).

Claim 19. Method according to Claim 7, where previous status data (table 64) for the element ("circuit element" of Welch) are represented which indicate at least one previous value ("old to new value", column 16, lines 55-56) for the state variable (column 8, line 36).

Claim 20. Method according to Claim 8, where previous status data (table 64) for the element ("circuit element" of Welch) are represented which indicate at least one previous value ("old to new value", column 16, lines 55-56) for the state variable (column 8, line 36).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (7:00 am- 4:30 pm EST).

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If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Anthony Knight 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

A handwritten signature in black ink, appearing to read 'Anthony Knight', is positioned above the printed name.

Anthony Knight  
Supervisory Patent Examiner  
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